

to facilitate its pushing with the palm of the hand. This section also contains a depression 9 with a flat bottom 9a, and external mechanisms including a button 7 inserted for sliding into a slot 8 to monitor and control the position of safety guards 3 at the extreme distal end of cannula 2. The safety mechanisms protruding distally from cannula 2 include conical tissue expanders 4 connected to the cannula, and safety guards 3 intended to cover a set of knives (not visible in this FIG. 1). Those are the externally visible features of this invention. If preferred for small cannulas, however, the tissue expanders could be mounted on the guards 3 and be movable therewith and may also, if preferred, be provided with an insufflation passageway.

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[Page 10, please replace the paragraph beginning at line 21, with the following:]

FIG. 2 shows details at the penetrating distal end of the trocar. A hollow outside cylinder 2 is the cannula which is firmly attached to the distal section of the handle 6 as was described in FIG. 1. Inside of the cannula 2, there is another hollow cylinder 13 which is the penetrator. This is the removable part which is attached to the proximal section of the handle 5, and can be removed after the penetration is completed to allow for the introduction of surgical instruments. The cannula 2 has its distal end beveled as shown by 2a to facilitate its introduction across the tissue opening with minimal resistance and thus can act as an expander. The penetrator hollow cylinder 13 has its distal end formed as a plurality of conical segment expanders 4 which are spaced by slots 4a to allow for the protrusion of pointed flat knives 14 joined at the center of the instrument and resembling thin arrowheads joined at a center. As shown in FIG. 2, the knives are positioned into the penetrator hollow cylinder 13 to a depth shown at 14a. The knife edges outside the slots 4a between the conical segment expanders protrude a substantial distance to insure adequate cutting. The set of knives is assembled into the penetrator cylinder 13 by spot welds 15, or by other similar

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mechanism. Right behind the crossing of the knife blades can be seen the plastic guard tips 3a. In FIG. 2, the guards are shown as removed from the knives so as to facilitate the understanding of their shapes and relationship to the knives. The subassembly of the guards 3 is part of a support disk 16 which in turn is part of the guards hollow stem 17 connecting them to an actuator spring and locking mechanism at the proximal section of the handle (not shown here). In the real instrument, the guard tips 3a are inserted around the knife blades which fit into the narrow spaces 3b between the guards. The guards are then assembled by being pushed forward until they protrude between the blade sides and the conical expander slots 4a as can be shown in FIG. 3 below. In FIG. 3, the tips of the guards are barely visible because the guards are retracted as when the trocar is first pushed against the skin.
